

CLAIMS

What is claimed is:

1. A method for sending interactive textual and graphical data from a content provider to a user's set-top box through a satellite broadcast system comprising:

sending said textual data and said graphical data from said content provider to a server that is located in an uplink center;

5 converting said textual data into OpenTV data and converting said graphical data into MPEG data by using an application streamer that is coupled to said server and that retrieves said textual data and said graphical data from said server;

using said application streamer to create a file directory structure based on said textual data;

10 using said application streamer to create a node tree on a broadcast streamer by mirroring said file directory structure;

mapping nodes in said node tree to files in said file directory structure;

allocating bandwidth and transmission frequency of said node based on priority of said node;

15 using said broadcast streamer to multiplex said OpenTV data and said MPEG data with a regular broadcast stream resulting in an interactive data stream; and,

sending said interactive data stream to said user's set-top box.

2. The method of claim 1 further comprising:

using set-top box application software to read said interactive data stream and display said interactive data stream on a user's display device; and,

monitoring said application streamer with a computer.

3. The method of claim 1 wherein said step of retrieving said textual data and said graphical data from said server further comprises querying said server for new data.

4. The method of claim 1 wherein said step of converting said textual data into said OpenTV data and converting said graphical data into said MPEG data further comprises creating system alerts.
5. The method of claim 4 wherein said step of creating system alerts comprises creating alerts upon detection of errors within said satellite broadcast system using SNMP traps, event logging, and visual queues in a graphical user interface.
6. The method of claim 2 wherein said step of monitoring said application streamer by a computer further comprises monitoring said application streamer, configuring said application streamer, making any necessary changes to said application streamer.
7. The method of claim 6 wherein said step of monitoring said application streamer further comprises monitoring said application streamer using a DCOM user interface over a network connection.
8. The method of claim 7 wherein said step of monitoring said application streamer further comprises monitoring the connection to said broadcast streamer, monitoring the connection to said server, and monitoring the status of said interactive data stream on said broadcast server.
9. A system for sending interactive textual and graphical data from a content provider to a user's set-top box through a satellite broadcast system comprising:
 - a server, located in an uplink center, that receives said textual data and said graphical data from said content provider;
 - 5 an application streamer, that is coupled to said server, that retrieves said textual data and said graphical data from said server, and that converts said textual data into OpenTV data and converts said graphical data into MPEG data;
 - a file directory structure that is created by said application streamer based on said textual data;

- 10 a node tree that is created by said application streamer on a broadcast streamer
by mirroring said file directory structure;
 nodes in said node tree that are mapped to files in said file directory structure;
 bandwidth allocation software, in said application streamer, that calculates
transmission frequency of said node based on priority of said node; and,
15 a multiplexer located on said broadcast streamer that multiplexes said
OpenTV data and said MPEG data with a regular broadcast stream resulting in an
interactive data stream.

10. The system of claim 9 further comprising:

- a set-top box that receives said interactive data stream;
 a software application located on said set-top box that reads said interactive
data stream and displays said interactive data stream on a user's display device; and
5 a computer that monitors said application streamer.